### STEEL FOR BUILDINGS.

Two papers, one on iron as a material for architectural construction, the other on mild steel and its application to building purposes, have been read and discussed at meetings of the Royal Institute of British Architects. Mr C W Siemens, F. R. S., took part in the discussion, and made clear to all who heard him what is meant in the present day by steel, particularly that form of the metal described technically as "mild steel." He made clear, too, the reason why steel is pure, and iron more or less impure. In producing the steel now used in engineering and architecture, a mass of some ten or twelve tons may be seen in the furnace in a state of perfect fluidity, in which state it is tested by means of samples both as to its chemical and mechanical condition. That steel can be shaped as required for any purpose. Mr. Siemens holds that "for purposes where boldness and grandeur of outline are essential no material can rival steel. When we want to bridge a third of a mile in span, or to construct a roof or dome of enormous size, there is no material like steel. If the object is simply to get tensile strength, as is the case in the chains of a suspension bridge, the use of steel wire enables us to attain a limit of strength exceeding a hundred tons per square inch, or as much as five times the tensile strength of wrought iron." In building a house of an area thirty feet by sixty, the using of steel girders instead of wood would effect a saving of two hundred and ten pounds, and the rooms would be higher. This is mild steel, which has nearly expelled iron from naval construction, has an absolute strength of about thirty tons per square inch, but its toughness is such that, if a bar eight inches in length is subjected to increasing strains, it will stretch to ten inches before giving way. This steel is of uniform strength, a great advantage when overloaded or in case of fire; and it is capable of being wrought into the highest artistic forms.

### MARRIAGE IN THE CELESTIAL EMPIRE.

Thirty pairs of embroidered shoes are necessary for the trousseau of a lady of position, and her [illegible] with sweetmeats, dried fruits, almonds, barley-sugar, [illegible], ginger and shaddocks. [illegible] rich silks, jewels for the [illegible], precious stones, [illegible] nails, bodkins for the hair, and other charming [illegible]. In the country a young woman whom [illegible] never has a dowry. She is purchased either by the husband himself or by his relations. A young man [illegible] brothers, she [illegible] her paternal [illegible] an express [illegible] arrangements [illegible] the marriage [illegible] agents called [illegible] is next presented [illegible]. The husband himself never [illegible] the wedding day, when she is [illegible] in a closed chair to his house. The key of the chair is handed to the bridegroom, who opens the door, and if the lady within pleases his taste he holds out his hand to her. If not, he shuts the door, and the engagement is at an end, the go-between having the right to retain the purchase-money.—*Leisure Hour.*

### HOW RICE IS COOKED IN JAPAN.

A recent traveler in Japan says: They do know how to cook rice in Japan, for the benefit of grocers and housekeepers in the United States. I investigated the matter. Only just enough water is used to prevent the rice from burning to the pot, which has a close cover, and it is steamed in a moderate fire. The rice is not stirred, rather than boiled, while cooking, and then the cover is taken off and the surplus steam and moisture are allowed to escape, and the rice is dished up in the form of snow-white kernels, each separate in the center and as dry as it is possible to be. Every housekeeper in the United States has a mental picture of the water-soaked article. I have seen something of cooking rice in our Southern States, but I do not [illegible] even there they [illegible] as it is done here, and in the Northern States but very few persons understand how to cook rice properly. I am sure that if rice as it is here in the [illegible] would greatly increase in America.

### FOUR RICH MEN.

The Liverpool [illegible] gives some rather interesting particulars as to the four men who are supposed to be the most wealthy living. Of these the richest is his Grace the Duke of Westminster, whose income is set down at £800,000 a year. Taking it at that sum, the amount which the duke can spend without [illegible] on his capital is £2,000 a day, £80 per hour, and £1 10s. a minute. The next man in the ascending scale is Senator Jones, of Nevada, whose income is valued exactly at one million sterling, giving him the right to spend, if he likes, £2 a minute out of the revenue. The head of the Rothschild family comes next with a yearly income of two millions, and the expenses which can defray thereout are of course double as great as those of the Senator. At the top of the list is Mr J. W. Mackey with a revenue of two and three-quarter millions, which enables him to disburse £7,000 a day, £300 an hour, and £5 a minute. The fortunes of the other three are insignificant if compared with this gentleman's wealth, for they were grown of many years either of successful toil or speculation or both combined. But Mr. Mackey, as the *Courier* remarks, was thirty years ago a penniless boy in Ireland. Sixteen years ago he was bankrupt, and now he is the owner of the richest silver mine that has ever been discovered.

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Soap bubbles are airy things, but they soon burst. Just so it is with men puffed up with vanity. They make a show for a season—sail on the current, but soon burst, and nothing is left of them.

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We must beware of treating Bible statements as a kind of jelly, to be run into whatever moulds we think of.

### ROMAN GLUTTONY.

With the Empire began that epoch of splendid gluttony which has no parallel. The history of the Cæsars, with some exceptions, is the narrative of a continual orgie. Take the notorious group at random—Commodus, Caligula, Tiberius, Verus, Vitellius, Nero, Heliogabalus, Domitan. These men spent their lives in a round of monstrous debaucheries. The day and the night, we are assured, were not long enough for their revels. Verus, the first to increase the number of the guests from nine to twelve, prolonged his suppers throughout the night. Nero sat at table from midday to midnight. Tiberius spent two days and a night at the festive board. They had huge appetites—not only the gigantic Maximilian, who devoured forty pounds of flesh-meat and drank five gallons of wine at a meal, but finical dandies like Commodus, who ate even in the bath; Vitellius, who ceased eating only while he slept; Domitian, who ate "out of his hand" to stay his stomach in the intervals of regular repast. Heliogabalus was perhaps the most elaborate, Vitellius the most extravagant of his race. The latter squandered in seven [illegible] £7,000,000, chiefly on his table. The total staggers belief, but let us examine the figures on the other side. The Roman epicure is reported to have paid £65 or $325 for a single [illegible] a brace of pigeons cost £1 12s. At an entertainment given to Vitellius by his brother 2,000 of the rarest fish, and 7,000 of the most curious birds were served up. One individual spent £5,000 on a single dish, made of the tongues of the costliest song birds. The Roman *bon vivant*, [illegible] on the brains of peacocks and pheasants, the tongues of nightingales, and the [illegible] of the most delicate fishes, swallowed thousands of pounds at a meal; and we [illegible] multiply the individual expenditure by the number of the guests to form [illegible] of a high-class dinner [illegible] Cæsars. A supper in the [illegible] or two thousand pounds [illegible] sesterces. [illegible] the Emperors [illegible] the food lavished in the [illegible] table. Seneca and Tacitus, among the authorities who tell us [illegible] spent $20,000 on one supper. Nero, master of the House of [illegible] which cost over £30,000, and [illegible] still more precious. It is [illegible] that the Emperor Verus [illegible] feast which cost [illegible] Apicius is responsible for the [illegible] spent £50,000 on a [illegible] confidence of the Emperor [illegible] Elagabalus, by citizens [illegible] actor and his [illegible] Like Vedius Pollio, who fattened [illegible] on the flesh of murdered [illegible] Nero, were brave [illegible] but Hop the comedian [illegible] and a small private fortune, [illegible] the great Roscius [illegible] year of his professional [illegible] which would hardly clear half a dozen barely decent suppers to [illegible] persons.—*Temple Magazine.*

### ELUSIVE VISIONS.

On the occasion of the fire which destroyed part of the Crystal Palace in the winter of 1866 part of the menagerie had been arranged in the [illegible]. The chimpanzee, however, was missed. It had escaped from his cage, and was presently seen on the roof endeavoring to save himself by clutching in wild despair at the iron beams the fire had spared. The struggles of the animal were watched with [illegible] curiosity mingled with horror and sympathy for the supposed fate which awaited the unfortunate monkey. What was the surprise of the spectators to find imminent tragedy to find that the object which in the guise of a terrified ape had excited their fears, received [illegible] in a piece of canvas blind, so [illegible] that to the eye of the imagination and when moved by the wind, it presented the exact [illegible] of a struggling animal! Such an [illegible], is of especial interest, because it proves to us that not one person [illegible] but a large number of spectators may [illegible] an object and perfectly seen—[illegible] delusion by a vivid imagination [illegible] of copying all the details of a specimen [illegible] the chief actor is entirely a myth. A singular case has been given on [illegible] authority of a lady, who, walking from Tourbyn to Falmouth—her [illegible] occupied with the subject of [illegible] fountains—was certain she saw in front of a lately-erected fountain, bearing the inscription, "If any man thirst, let him come unto me and drink." As a matter of course she mentioned her interest in seeing such an erection to the daughters of the gentleman who was supposed to have placed it in its position. They assured her that no such fountain was in existence; but convinced of the reality of her senses, on the ground that "seeing is believing," she proceeded to the spot where she had seen the fountain, only to find, however, a few scattered stones in place of the expected erection.—*Chambers's Journal.*

### ADVERTISING HIS MUTTON.

At the Church of Great Salkeld, in Cumberland, this custom prevailed thirty or forty years ago; I fancy that it has now fallen through. After the banns were published for the third time the parish clerk exclaimed: "God speed them well!" Nor was this the only curious custom in this parish. As the congregation were leaving the church after the service, the clerk, taking his stand on a "thruff" in the churchyard, announced all the sales by auction which were to be held in the parish during the week, and other matters of interest to the parishioners, such as, "On Wednesday next Willie Pearson will kill a sheep," evidently suggesting that Willie Pearson would be glad to dispose of part of the mutton to his neighbors, his own family not being equal to a whole sheep.—*Notes and Queries.*

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In general, pride is at the bottom of all great mistakes. All the other passions do occasional good, but wherever pride puts in its word, everything goes wrong, and what might be desirably to do quietly and innocently, it is morally dangerous to do proudly.

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Success in most things depends on knowing how long it takes to succeed.


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